



CA 41742  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

*I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to Commissioner of Patents and Trademarks, Washington, D.C. 20231 on September 17, 2001.*

*Marti Carrillo*  
Marti Carrillo

Applicant : Zhigang Fang, et al.

Application No. : 09/494,877

Filed : January 31, 2000

Title : LOW COEFFICIENT OF THERMAL  
EXPANSION CERMET COMPOSITIONS

Grp./Div. : 1742  
Examiner : D. Jenkins

Docket No. : 34098/GTL/S61

#5  
126  
10/13/01  
RECEIVED  
OCT 3 2001  
TC 1700

RESPONSE

Assistant Commissioner for Patents  
Washington, D.C. 20231

Post Office Box 7068  
Pasadena, CA 91109-7068  
September 17, 2001

Commissioner:

In response to the Office action dated April 16, 2001, Applicants enclose herewith a Petition for an extension of time with an appropriate Petition fee, and respond to each and every point raised by the Examiner as follows.

Claims 1 to 48 pending in this patent application have been rejected, under the judicially created doctrine of obviousness-type double patenting, as being allegedly unpatentable over claims 1 to 35 of U.S. Patent No. 6,063,502 (the cited patent). The Examiner notes that the claims pending in this application are not patentably distinct from the claims of the cited patent because "both claim the composite structure and bit formed by the ordered matrix/fiber array."

Applicants submit that the subject matter recited in the pending claims of this patent application is sufficiently different from that recited in the claims of the cited patent for the following reasons. Initially, it is important to note that none of the claims pending in this application recite or in any way relate to a material having an *ordered or oriented structure*, as recited in the claims of the cited patent. Further, none of the claims pending in this application recite a material having a specific placement of any ordered arrangement of phases *at the working surface*. Since neither one of these invention features recited in the cited patent claims are recited or even remotely suggested in the claims of this pending application, Applicants submit that the subject matter recited in the pending claims is patentably distinct therefrom.

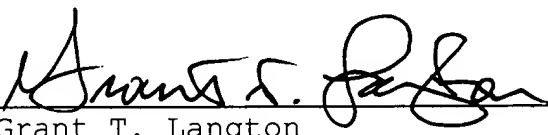
A still further distinction between the subject matter disclosed in the cited patent and pending patent application claims is that the pending patent application independent claims specifically recite a cermet material comprising the *use of a binder alloy*, and specifically recite that such binder have a quantified *coefficient of thermal expansion*. The recitation of these invention features in the pending claims is not unintended, as the thrust of the invention (as recited in the specification) is the formation of a cermet material having a low coefficient of thermal expansion. It is important to appreciate that neither one of these important invention features are recited or even remotely suggested in either the specification or claims of the cited patent.

For the reasons presented above, it is apparent that claims 1 to 48 pending in this patent application recite subject matter that is patentably different and non-obvious from the subject matter recited in the claims of the cited patent. Applicants, therefore, respectfully request that the rejection of claims 1 to 48 based on

Application No. 09/494,877

obviousness-type double patenting be reconsidered and withdrawn, and that these claims be substantively examined on the merits.

Respectfully submitted,  
CHRISTIE, PARKER & HALE, LLP

By   
Grant T. Langton  
Reg. No. 39,739  
626/795-9900

GTL/mac

MAC PAS380955.1--9/17/01 4:03 PM